

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION**

Edge Capture L.L.C. and Edge Specialists,
L.L.C.,

Plaintiffs,

v.

Barclays Bank PLC; Barclays Capital Inc.;
UBS AG; UBS Financial Services, Inc.; UBS
Securities, L.L.C.; Wolverine Trading L.L.C.;
and Wolverine Execution Services L.L.C.,

Defendants.

Case No. 09-cv-1521

Judge Charles R. Norgle, Sr.
Magistrate Judge Morton Denlow

**MEMORANDUM IN SUPPORT OF DEFENDANTS
WOLVERINE TRADING L.L.C. AND WOLVERINE EXECUTION
SERVICES L.L.C.'S MOTION TO DISMISS AMENDED COMPLAINT**

Pursuant to Fed. R. Civ. P. 12(b)(6), Defendants Wolverine Trading, L.L.C. (“Wolverine Trading”) and Wolverine Execution Services, L.L.C. (“WEX”) (collectively “Wolverine”) hereby move to dismiss Plaintiffs Edge Capture L.L.C. and Edge Specialists, L.L.C.’s (collectively “Edge”) amended complaint for patent infringement for two reasons. First, the patents asserted by Edge—U.S. Patent No. 7,251,629 (“the ‘629 patent”) and U.S. Patent No. 7,177,833 (“the ‘833 patent”)—are invalid for failure to claim patentable subject matter under 35 U.S.C. § 101 (“Section 101”), as that section recently was interpreted by the Supreme Court in *Bilski v. Kappos*, 130 S. Ct. 3218 (2010). Second, the Amended Complaint still fails to identify which Wolverine product or service, if any, allegedly infringes Edge’s patents.

I. BACKGROUND

A. The Parties

Plaintiff Edge Capture is a patent holding company and is the purported assignee of the ‘629 and ‘833 patents. (Am. Compl. ¶ 45.) Edge Capture’s only assets are these patents. Plaintiff Edge Specialists is the alleged exclusive licensee of the patents-in-suit. (*Id.*) (A copy of the Amended Complaint, with the patents-in-suit as exhibits, is attached hereto as Exhibit 1.)

Defendant Wolverine Trading is a proprietary trading company headquartered in Chicago. Defendant WEX is an independent, full-service broker-dealer headquartered in Chicago specializing in the execution of equities, options, and futures transactions.

B. The Patents-In-Suit

The ‘629 patent and the ‘833 patent are both entitled “Automated Trading System in an Electronic Trading Exchange.” (Am. Compl., Ex. A & B.) The ‘629 patent was filed on October 14, 1999 and issued on July 31, 2007. (*Id.* Ex. B.) The ‘833 patent was filed on July 18, 2000 and issued on February 13, 2007. (*Id.* Ex. A.) Both of the patents-in-suit include claims for methods and systems that automate decision-making regarding the submission of orders for “traded items” (such as stock options). (*Id.*, Ex. A & B.) In describing the “Background of the Invention,” the patents acknowledge that in 1999, this same decision-making regarding the submission of orders already was being performed manually and/or with computers by “traders”:

Most trader stations in use today rely upon the traders themselves to decide whether to submit an order in response to a trading opportunity presented through the exchange. In this regard, the trading information is received from the exchange, processed, and displayed on a monitor of the trader’s station. The trader reads the trading information from the monitor and decides whether or not to submit an order. The trader submits an order by entering instructions into the trader station using a keyboard or mouse. [‘629 Patent at 1:40-48; *see also* ‘833 Patent at 1:53-62.]

The patents further acknowledge that in 1999, advances in computer and communications technology had resulted in a push towards automation of the formerly manual and/or semi-automatic decision-making and order submission actions performed by traders:

Recent advances in computer and communications technology have led to electronic trading exchange system networks. Electronic trading exchange system networks use communications networks and computers to replicate traditional face-to-face exchange functions. For example, centralized exchange computers disseminate market information, maintain records and statistics, settle cash payments, determine risk based margin requirements, and match trades. * * *

Attempts have been made to implement trading systems that automate decision-making so that orders may be submitted with limited trader interaction. These systems have a number of drawbacks. For example, user-friendly systems that automatically submit orders without trader interaction, while faster than a human trader, are relatively slow in terms of computer speed due to application and system design. [*'629 Patent at 1:17-25, 1:49-55; see also '833 Patent at 1:17-25, 1:65-67, 2:1-5.*]

To increase the speed of both the decision-making processes and the resulting processes governing submission of orders, the *'629* and *'833* patents proposed fully automating these formerly manual and/or semi-automatic processes by employing generic “equipment,” “backend computers,” “interfaces,” and/or “networks”:

The present invention recognizes that electronic trading exchange system computers match buy and sell orders on a first come/first serve basis. Accordingly the speed and accuracy of submitting orders or other responses is critical to the trader’s ability to participate in the most profitable transactions. Even short delays in response may freeze a trader out of an otherwise lucrative transaction.

The present invention is capable of reducing the time it takes for the trader to submit an order in response to incoming trading information from the exchange. [*'629 Patent at 5:42-52; see also '833 Patent at 3:36-45.*]

Specifically, the *'833* patent includes claims directed to a fully “automated trading system” and/or a fully “automated trading method”—that is, a method that uses computers, rather than traders, to perform the decision-making and submission actions. According to the *'833* patent, by allowing “calculators,” “computers,” “equipment” and “interfaces” to perform the same decision-making and submission processes that previously were performed by traders, the claimed system/method reduces response time and increases accuracy. *Id.* For example, *'833* patent claim 1 recites:

An automated trading system for use in an electronic exchange system network, comprising:

A receiver interface that receives market price information for the first traded item from an exchange;

A transaction value calculator that generates a transaction value for the first traded item based on price information for a second traded item related to the first traded item;

Decision logic using at least a portion of the received market price information and the transaction value to generate a decision whether to submit a response to buy or sell the first traded item; and

An output interface for outputting a request for market transaction for one of the first traded item and the second traded item for transmission to the exchange in response to said decision logic. [‘833 Patent at 29:20-35.]

The ‘629 patent includes claims directed to the automatic use of, and reference to, conventional “decision logic” and electronic “look-up tables” (i.e., charts having previously stored theoretical transaction values (or ideal prices)) to determine when a derivative (such as an option) is beneficially priced. *See* cl. 27 at 26:38-54; cl. 29 at 26:59-65. The patent acknowledges that use of, and reference to, decision logic and/or look-up tables was, by itself, nothing new in 1999 because traders had long used such logic/tables to make decisions (‘629 Patent at 1:36-37). Nonetheless, the ‘629 patent purports to claim an entirely “automated” method and/or system for consulting decision logic and/or look-up tables to determine if a traded item (such as an option) is desirably priced and then generating an order for such item.

The ‘629 and the ‘833 patents both make clear that the “calculators,” “computers,” electronic “interfaces,” “networks,” and “equipment” referenced in their claims are not specially-constructed or uniquely-configured machines or technologies. Rather, these items are the basic sorts of computers, interfaces and networks commonly available to any trader (or any member of the public, for that matter). *See* ‘629 Patent at 1:29-36, 1:57-65; ‘833 Patent at 1:5-35.

C. The Court’s Prior Rulings and the Amended Complaint.

On October 20, 2009, this Court ordered Edge to file a more definite statement due to the “vague and ambiguous nature” of the infringement allegations contained in Edge’s initial Complaint. (Ex. 2, Order of Oct. 20, 2009 at 1.) Specifically, the Court rejected Edge’s broad, nonspecific accusations of infringement by Defendants for alleged use of “technology to perform automated/algorithmic trading of derivatives” (Compl. ¶¶ 39, 44)—a description applicable to electronic trading activities (such as market-making, auto-quoting, and equities trading) that Edge, itself, admitted are not covered by the claims of the asserted patents. In the Court’s words, the initial Complaint’s “description of defendants’ alleged infringing activities lack[ed] specificity.” (Ex. 2 at 1.) Further, while the Court declined to rule on the Section 101 issue in its October 20 Order, it noted in that Order that “substantial issues remain concerning the validity of Edge’s ‘629 and ‘833 patents under *In re Bilski*.” (*Id.*)

In response to this Court's Order, on December 4, 2009, Edge filed an Amended Complaint that is an interesting attempt at sleight-of-pen. While many new paragraphs have been added, and many of the initial Complaint's paragraphs have been rewritten, in an effort to make it look as if the Amended Complaint is far expanded and "more definite," in fact, the new and/or rewritten paragraphs add virtually no specificity whatsoever to the identification of Wolverine's allegedly infringing activities—the allegations that this Court was most concerned about when ordering the more definite statement. (*Id.*) Indeed, while the Amended Complaint now includes seven pages discussing the history of automated trading (Am. Compl. at 4-10), and devotes four pages to quoting portions of the patent specifications (*id.* at 10-13), the Amended Complaint continues to lack any description of how exactly Wolverine allegedly is infringing the patents—beyond the same type of general identification of electronic trading activities previously rejected by the Court. In fact, as to Wolverine, the Amended Complaint does nothing more than quote Wolverine's website and identify five individual, Wolverine derivatives trades (*Id.* ¶¶ 93, 96), to establish/allege that Wolverine is engaged in electronic/algorithmic trading activities *generally*.

ARGUMENT

I. THE PATENTS-IN-SUIT FAIL THE STATUTORY TEST FOR PATENTABLE SUBJECT MATTER.

To be patentable, an invention must meet the subject matter eligibility requirements of Section 101. A patent claim may cover a process or method, but not "laws of nature, natural phenomena, [or] abstract ideas." *Bilski*, 130 S. Ct. at 3225. Fundamental principles, mental processes, and intellectual concepts are the basic tools of science, technology and commerce, and therefore cannot be patented. *Id.* at 3230; *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972). Whether a claim is patent-eligible under Section 101 is an issue of law and is the "threshold" inquiry of patent validity. *Bilski*, 130 S. Ct. at 3225. Accordingly, any patent claim "failing the requirements of § 101 must be rejected even if it meets all of the other legal requirements of patentability." *In re Bilski*, 545 F.3d 943, 950-51 (Fed. Cir. 2008) (*en banc*).

In its June 28, 2010 *Bilski* decision, the Supreme Court clarified how to determine what constitutes patentable subject matter and what, in contrast, is an unpatentable abstract idea. Specifically, the Court held that the machine-or-transformation test relied on by the Federal Circuit "is a useful and important clue, an investigative tool, for determining whether some

claimed inventions are processes under § 101,” although “not the sole test for deciding whether an invention is a patent-eligible ‘process.’” *Bilski*, 130 S. Ct. at 3227.

In *Bilski*, the Supreme Court rejected the patent claims at issue as unpatentable “abstract ideas”—“the concept of hedging risk and the application of that concept to energy markets.” *Id.* at 3229. The Court repeated its earlier admonishment in *Parker v. Flook*, 437 U.S. 584 (1978), that “the prohibition against patenting abstract ideas cannot be circumvented by attempting to limit the use of the formula to a particular technological environment.” *Id.* at 3230.

On June 28, 2010, the United States Patent and Trademark Office (“PTO”) issued a memorandum setting forth the examining procedure to be followed when evaluating patentability under Section 101 in light of the Supreme Court’s *Bilski* ruling. (PTO Mem. of June 28, 2010, attached as Ex. 3.) The memorandum directs examiners first to apply the machine-or-transformation test and, second, to consider any “clear indication” that the claimed method is (or is not) directed to an abstract idea:

Examiners should continue to examine patent applications for compliance with section 101 using the existing guidance concerning the machine-or-transformation test as a tool for determining whether the claimed invention is a process under section 101. . . . *If a claimed method does not meet the machine-or-transformation test, the examiner should reject the claim under section 101 unless there is a clear indication that the method is not directed to an abstract idea.* [*Id.* at p. 2.]

On July 27, 2010, the PTO published a more comprehensive guidance document in the Federal Register, providing expanded direction as to how to evaluate whether a claim is directed to an unpatentable abstract idea. (Ex. 6.) As per this latest guidance document, four factors are to be considered and weighed under Section 101: (1) the machine test, (2) the transformation test, (3) whether performance of a claimed method involves an application of a law of nature, and (4) whether a general concept is involved in executing the steps of the method. (*Id.*)

Drawing upon the Supreme Court, Federal Circuit and PTO guidance, this Court should now determine whether Edge’s patents claim patentable subject matter under Section 101 by determining, as a matter of law, (a) whether the claims satisfy the machine-or-transformation test, and (b) if they do not, whether there is a clear indication that the claims are or are not directed to an abstract idea.¹

¹ The Federal Circuit very recently discussed the Supreme Court’s *Bilski* decision in *King Pharms., Inc. v. Eon Labs, Inc.*, ___ F.3d ___, 2010 WL 3001333, at *9 (Fed. Cir. Aug. 2, 2010). In that opinion, the Federal Circuit, though not applying Section 101 to the claims-at-issue, noted that under *Bilski*, patent claims must be considered as a whole and

A. The Edge Patents Fail the Machine-or-Transformation Test.

Under the machine-or-transformation test, to qualify as patentable subject matter, a process patent claim must either: (1) be “tied to a particular machine or apparatus”; or (2) “transform[] a particular article into a different state or thing.” *Bilski*, 545 F.3d at 954, 961-62 (citing *Benson*, 409 U.S. at 70). “[E]ven a claim that recites ‘physical steps’ but neither recites a particular machine or apparatus, nor transforms any article into a different state or thing, is not drawn to patent-eligible subject matter.” *Bilski*, 545 F.3d at 961. Mere token recitations of machines or transformation do not convert an otherwise ineligible claim into one that meets the machine-or-transformation test. *See id.* at 957.

Two guidelines govern application of the machine-or-transformation test: (1) “the use of a specific machine or transformation of an article must impose meaningful limits on the claim’s scope”; and (2) “the involvement of the machine or transformation in the claimed process must not merely be insignificant extra-solution activity.” *Id.* at 961-62 (citing *Benson*, 409 U.S. at 71-72; *Parker v. Flook*, 437 U.S. 584, 590 (1978)). As explained by the Federal Circuit:

The raw materials of many information-age processes, however, are electronic signals and electronically-manipulated data. And some so-called business methods, such as that claimed in the present case, involve the manipulation of even more abstract constructs such as legal obligations, organizational relationships, and business risks. Which, if any, of these processes qualify as a transformation or reduction of an article into a different state or thing constituting patent-eligible subject matter? * * *

[T]he process as claimed encompasses the exchange of only options, which are simply legal rights to purchase some commodity at a given price in a given time period. . . . Thus, claim 1 does not involve the transformation of any physical object or substance. Given its admitted failure to meet the machine implementation part of the test as well, the claim entirely fails the machine-or-transformation test and is not drawn to patent-eligible subject matter. [Bilski, 545 F.3d at 962, 964 (emphasis added).]

The claims of both the ‘629 and ‘833 patents are directed only to methods for automatically determining whether a “first traded item” (such as a stock option) is desirably priced, and then automatically submitting an order for the item if a desirable price is identified. Thus, like the claims rejected by the Supreme Court and the Federal Circuit in *Bilski*, the Edge claims—which similarly deal with “the exchange of only options,” *id.* at 964—fail the machine-or-transformation test and seek only to monopolize the abstract idea of automating derivatives trading activity. *See, e.g., Bilski*, 130 S. Ct. at 3230.

must be evaluated in light of the “wisdom behind” the machine-or-transformation test (which, the Federal Circuit noted, was not rejected by the Supreme Court).

1. The ‘629 and ‘833 Patent Claims Do Not Satisfy the “Machine” Test

There are four basic requirements for a claim to meet the “machine” test. First, the claim must be limited to a *particular* or *specific* machine or structure. *Bilski*, 545 F.3d at 961-62. Second, the machine or structure must be sufficiently “tied” to the claimed process. *Id.* Third, the use of the machine must impose meaningful limits on the claim scope. *Id.* Fourth, the machine must not be used for “insignificant extra-solution activity.” *Id.* at 957 & n.14. Failure to satisfy any one of these four requirements compels a finding that the claims do not satisfy the “machine” test, and the ‘833 and ‘629 patent claims meet none of these requirements. (For a claim-by-claim analysis, *see* Charts attached hereto as Exhibits 4 and 5.)

a. The claims are not limited to any specific machine or apparatus

Courts strictly interpret the requirement that a claim be tied to a specific machine; nominally recited machines or structures will not convert an ineligible claim into an eligible one. *See Ex parte Synder*, 2009 WL 1346265, at *11-12 (B.P.A.I. May 12, 2009). The claims of Edge’s patents generically recite the use of “electronic exchange networks,” “interfaces,” “logic,” “memory,” “backend computers,” “trader stations,” “calculators” and “equipment” (*see* Am. Compl., Ex. A, cls. 1, 21-24, 29, 30, 34; *id.*, Ex. B, cls. 1, 20-23, 27, 32, 36, 44-45). These recited non-specialized technologies—technologies that are accessible to any trader and/or any member of the public and that, in most cases, can be purchased from an ordinary office supply store—simply are not the type of specific or particular machines required by the machine-or-transformation test. *See Benson*, 409 U.S. at 64-73 (method of programming a general purpose digital computer to convert signals not patentable subject matter); *In re Grams*, 888 F.2d 835, 841 (Fed. Cir. 1989) (merely specifying “that the method be performed with a programmed computer” does not make patentable subject matter); *Ex parte Halligan*, Appeal No. 2008-1588, 2008 WL 4998541, at *9 (B.P.A.I. Nov. 24, 2008) (same); *Ex parte Wasynczuk*, Appeal No. 2008-1496, 2008 Pat. App. LEXIS 14, at *32 (B.P.A.I. June 2, 2008) (same); *Every Penny Counts Inc. v. Bank of Am. Corp.*, No. 2:07-cv-42, 2009 U.S. Dist. LEXIS 53626, at *6-7 (M.D. Fla. May 27, 2009) (finding that simply because the process at issue requires machines or computers to work does not mean that the process or system is a machine); *Ex parte Myr*, 2009 WL 3006497, at *8-10 (B.P.A.I. Sept. 18, 2009) (rejecting claims for appraising real property which required use of only general purpose computer and explaining that to permit such claims “would be to permit clever drafting of process subject matter not contemplated by the case law and to exalt form over substance in determining whether the claimed process passes § 101

muster”); *Ex parte Hindman*, 2009 WL 4004984, at *4 (B.P.A.I. Nov. 18, 2009) (same); *Ex parte Goud*, 2009 WL 2203002, at *4 (B.P.A.I. July 20, 2009) (same).

In fact, if Edge truly were permitted to patent the use of basic computers, equipment and networks (like the internet) to automatically perform the very operations that traders had manually or semi-automatically been performing for years before the Edge applications were filed, then Edge would literally be able to corner the options trading market(s). No trader would be able to use even the most basic and widespread technological aids to perform fundamental and long-standing pricing, decision-making and order submission processes. This prospect was found to be particularly troublesome by the Supreme Court in *Benson*, where the Court rejected claims for a formula to covert numerals that “has no substantial practical application except in connection with a digital computer” on the basis that “the patent would wholly pre-empt the mathematical formula and in practical effect would be a patent on the algorithm itself.” *Benson*, 409 U.S. at 71-72; *see also Bilski*, 130 S. Ct. at 3231 (“limiting an abstract idea to one field of use or adding post-solution components d[oes] not make the concept patentable”).

Because Edge’s trading method and trading system claims do nothing more than call out the use of generic, non-specific computers, networks and equipment to automate (and, thus, speed up) the same type of trading methods that the patents acknowledge were being performed by traders in 1999 (and before), under the clear directions of *Benson* and *Bilski*, these claims cannot be found to satisfy the specific and particular machine or apparatus requirement.

b. The referenced devices are not “tied” to the claimed methods

The technological devices recited in the ‘629 and ‘833 patent claims simply are not “tied” to the decision-making and order submission methods that are the substantive heart of those claims. In other words, the decision-making and order submission steps that are called out in the Edge patent claims can be performed with or without the use of the recited devices. In fact, the patents themselves describe in detail how traders were manually or automatically performing those exact methods—using basic “trader stations”—years before the Edge patent applications. The devices recited in the patent claims do not change the formerly manual and/or semi-automatic steps taken by these traders; by the patents’ own design and admission, the devices merely speed up those steps. Yet, the law is clear that merely expediting a mental process or algorithm through specified use of generic equipment does not fulfill the machine prong of the machine-or-transformation test. *See Benson*, 409 U.S. at 67, 71 (noting that “mathematical formula involved here has no substantial practical application except in connection with a digital

computer,” the claimed conversion “can be done mentally through use of [a] table” and “performed without a computer”); *Bilski*, 545 F.3d at 961 n.26 (“a claimed process wherein all of the process steps may be performed entirely in the human mind is obviously not tied to any machine or does not transform any article into a different state or thing”).

c. The referenced devices impose no meaningful limit on claim scope

Due to the omnipresence of computers and networks at trading firms and trading exchanges, the device recitations in Edge’s patent claims broaden their scope to the point where virtually all option pricing, decision-making and order submission processes will now potentially infringe. This is because Edge effectively claims a patent monopoly over the basic use of computers, equipment and networks of every kind to automatically perform the very operations that traders had manually and/or automatically been performing for years. If Edge is permitted to control such all encompassing actions/processes, it literally will be able to prevent all traders from using even the most basic technological aids to perform fundamental and long-standing methods. The machine-or-transformation test does not permit this sort of untenable outcome. *See Benson*, 409 U.S. at 71-72; *Bilski*, 545 F.3d at 963 (“a data-gathering step to an algorithm is insufficient to convert that algorithm into a patent-eligible process”); *In re Halligan*, 2008 WL 4998541, at *9 (specified use of a “programmed computer” “fails to impose any meaningful limits on the claim’s scope as it adds nothing more than a general purpose computer that has been programmed in an unspecified manner to implement the functional steps recited in the claims”); *Ex parte Hasegan*, No. 2008-4742, 2009 WL 86725, at *6 (B.P.A.I. Jan. 13, 2009).

d. Use of the referenced devices is incidental to the claimed steps

The generic technological devices referenced in the ‘629 and ‘833 patent claims are included, by the patents’ own admission, solely to automate and speed-up the decision-making and order submission processes already being manually or automatically performed by traders. *The Edge patents, themselves, acknowledge that the claimed steps for determining pricing opportunities in options, for hedging options positions through purchase of underlying securities, and for using pre-calculated look-up tables to expedite trading decisions simply did not in 1999, and do not now, require computers to be performed.* Accordingly, the patents’ suggested use of computer equipment to increase speed is deemed to be “insignificant postsolution activity” that “will not transform an unpatentable principle into a patentable process.” *Diehr*, 450 U.S. at 191-92; *see also Bilski*, 130 S. Ct. at 3230; *Hasegan*, 2009 WL 86725, at *6; *Flook*, 437 U.S. at 586, 590; *Grams*, 888 F.2d at 841.

2. The ‘629 and ‘833 Patent Claims Fail the “Transformation” Test.

The ‘629 and ‘833 patent claims do not transform any physical article into a different state or thing, and thus fail the second part of the machine-or-transformation test. Rather, the Edge claims merely manipulate data in order to execute trades of options and their underlying securities, neither of which is a physical object. *See Bilski*, 545 F.3d at 965; *see also Ex parte Barnes*, No. 2007-4114, 2009 WL 164074, at *7 (B.P.A.I. Jan. 22, 2009); *Ex parte Aoyama*, 2009 WL 4001920 (B.P.A.I. Nov. 17, 2009). The Federal Circuit has made clear that “[p]urported transformations or manipulations simply of public or private legal obligations or relationships, business risks, or other such abstractions cannot meet the test because they are not physical objects or substances, and they are not representative of physical objects or substances.” 545 F.3d at 963. Thus, the claims of the patents-in-suit do not and cannot satisfy the transformation prong of the “machine-or-transformation” test.² (For a claim-by-claim analysis, *see* Charts attached as Exhibits 4 and 5.)

B. There is Clear Indication that Edge’s Claims Are Directed to an Abstract Idea.

As directed by the *Bilski* Court and the PTO guidance documents, given that Edge’s claims fail the machine-or-transformation test, those claims can only be deemed patentable subject matter if there is a “clear indication” that the claims are *not* directed to an abstract idea. Ascertaining the existence of such a “clear indication” requires consideration of the final two PTO factors: (1) whether performance of the claimed method involves a specific application of a law of nature; and (2) whether a general concept is involved in executing the steps of the method. Unfortunately for Edge, there is no such “clear indication” to save Edge’s claims; quite to the contrary, there is clear indication that Edge’s claims are, in fact, directed solely to the abstract idea of automating derivatives trading for increased speed.

1. The Edge Patent Claims Do Not Involve Specific Application of a Law of Nature.

² *See also Ex parte Manjeshwar*, 2009 WL 3756410, at *8 (patent claims directed to simulation system did not meet “transformation” test because the process produced no physical or tangible objects); *Ex parte Hindman*, 2009 WL 4004984, at *4 (patent claims directed to interactive wagering systems, which used input data to determine the effect of proposed wagers on pari-mutuel pools and thus determine whether to place a wager, did not pass the “transformation” test because even if the data were used in an algorithm, the “data itself is not transformed into a different state or thing”); *Ex parte Myr*, 2009 WL 3006497, at *10 (similar); *Ex parte Haworth*, 2009 WL 2342033, at *6 (B.P.A.I. July 30, 2009) (similar); *Ex parte Muller*, 2009 WL 4001916, at *4 (B.P.A.I. Nov. 17, 2009) (similar).

The latest PTO guidance document explains that if performance of a claimed method involves *specific application* of a law of nature (as opposed to general use of, or reference to, the law of nature itself), then the method is less likely to be drawn to an abstract idea. Ex. 6 at 43925. Here, however, the only “law of nature” arguably involved is that which provides that actions taken by a computer are faster than those taken by a person manually or mentally. Of course, even if this truly could be deemed a law of nature, Edge’s patent claims do not include a *specific application* of such law, as the claims do nothing more than generically suggest automating (i.e., using computers to perform) the same manual and mental derivatives pricing and trading steps that had been performed by traders for years before the patents were filed.

2. The Edge Patent Claims Involve Only Execution of a General Concept.

The latest PTO guidance document further explains that where performance of a claimed method involves only implementing/executing a general concept (or a general principle, theory, plan or scheme), the method is likely an unpatentable abstract idea. Here, as discussed above, the Edge patents do no more than claim a general concept: automating derivatives trading activities for increased speed. As warned by the PTO, the facts that (a) Edge’s claimed methods/systems preempt the entire field of electronic derivatives trading (which is the only type of trading available for some derivative products and/or on some derivative exchanges), and (b) Edge’s claimed methods/systems cover both known and unknown technological means for derivatives trading (so long as the methods are “automated”), further highlight and direct the conclusion that Edge’s claims are directed to nothing more than an unpatentable abstract idea.

3. The PTO Has Consistently Rejected Claims Like Edge’s As Directed To An Abstract Idea.

Several very-recent decisions of the Board of Patent Appeals and Interferences have interpreted and applied the Supreme Court’s *Bilski* ruling to reject claims like Edge’s—claims that attempt to cover mere automation of previously performed manual and/or mental steps. For example, in *Ex parte Proudler*, Appeal 2009-006599, 2010 WL 2727840, at *1 (B.P.A.I. July 8, 2010), the panel considered a method for controlling the processing of data, wherein security controls were applied to data based on individualized rules. The panel rejected the method as an unpatentable abstract idea under Section 101, explaining that “[a] claim that recites no more than software, logic or a data structure (i.e., an abstraction) does not fall within any statutory category.” *Id.* at *2. The applicant’s attempt to overcome the claim deficiencies by utilizing a

general computer programmed to perform the method steps did not save the application, because “abstract software code is an idea without physical embodiment.” *Id.*

In *Ex parte Birger*, Appeal 2009-6556, 2010 WL 2800803 (B.P.A.I. July 13, 2010), the panel similarly rejected an applicant’s claims pursuant to the Supreme Court’s *Bilski* ruling. The claimed invention in *Birger* was “a computer architecture for enterprise device applications,” which provided for a “real-time, bi-directional communication layer” allowing secure communications between two devices. The panel found that this was an abstract idea: simply automating the method steps for secure bi-directional communication, with reference only to use of a general computer via terms such as “processor,” “device,” “computer readable medium” and “system architecture,” did not make the claims patentable. *Id.* at *3.

In *Ex parte Caccavale*, Appeal 2009-6026, 2010 WL 2901727 (B.P.A.I. July 23, 2010), the panel rejected the one claim-at-issue: a process claim for “statistical analysis computations.” The panel found the claim similar to the one at issue in the Supreme Court’s *Benson* case, in which the claim for an “algorithm to convert binary-coded decimal numerals into pure binary code” was found unpatentable under Section 101. The *Caccavale* panel applied the holding of *Benson* and rejected the process claim as unpatentable, finding allowance of such a claim would wholly pre-empt the mathematical idea of performing statistical analyses. *Id.* at *6.

In *Ex parte Fellenstein*, Appeal 2009-6595, 2010 WL 2985341 (B.P.A.I. July 27, 2010), the applicant claimed an apparatus and method for facilitating communication by programming a “usage processor” to identify times when a user is most likely to be available. *Id.* at *1. The panel recognized that although the claims recited a “monitor,” “database,” “usage processor,” and “usage indicator,” the patent was drawn to the programming of a computer to perform the method steps, and explained that “abstract software code is an idea without physical embodiment,” and thus unpatentable under *Bilski*. *Id.* at *2-3. “[T]he disclosed and claimed invention is directed to software per se, abstract ideas, abstract concepts and methodologies, and the like, including various data structures, software, software applications, and abstract intellectual processes associated with them.” *Id.* at *3.

In *Ex parte Choo*, Appeal 2009-6352, 2010 WL 2985362 (B.P.A.I. July 28, 2010), the panel rejected claims directed to a computer system that restricted access to files by applying access rules. Although the claim recited a “system,” the panel found that when viewed in its entirety, the claim was merely a method performed by a programmed general purpose computer, and must be evaluated under Section 101 in the same way as a method claim. *Id.* at *3. “[T]he

claim's body recites nothing more than data structures and software, and the claim's preamble (i.e., 'a computer system for controlling access to certain files by processes') only serves to limit the claim by describing the invention's intended use." *Id.*

In *Ex parte Johnson*, Appeal 2009-6718, 2010 WL 2998170 (B.P.A.I. July 29, 2010), the applicant claimed a system and method for authenticating web sessions and other transactions, comprised of programming a computer to perform algorithmic calculations on data. The panel held that "a claim that recites no more than software, logic, or a data structure (i.e., an abstraction) does not fall within any statutory category of patentable subject matter." *Id.* at *2.

Finally, in *Ex parte Elkins*, Appeal 2009-6190, 2010 WL 3017285 (B.P.A.I. July 30, 2010), the panel rejected claims as drawn to an abstract idea where the claimed method applied computations to produce a model of electricity price and consumption for a consumer. *Id.* at *1. The panel noted that a "claim that recites no more than software, logic or a data structure" is not patentable, and that claims "may be fairly characterized as being directed to abstract ideas . . . since these claims are directed to a mathematical modeling functionality." *Id.* at *3.

Like the applicants in each of these PTO proceedings, Edge seeks patent protection for the abstract idea of automating known actions—identifying price discrepancies, submitting an order based on those price discrepancies, etc.—using general purpose computer equipment (e.g., "backend computers," "trader stations," "calculators" and "equipment") and non-specific software constructs (e.g., "interfaces" and "logic"). Like the other applicants, Edge can no longer hide behind legal uncertainty: the Supreme Court, the Federal Circuit and the PTO have made clear that neither Edge nor any other applicant can obtain patent protection for the abstract idea of automating known methods, even when applied in a specific industry/technological environment, like options trading. The Edge patents should thus be found invalid under Section 101, as a matter of law, and this case should be dismissed in its entirety.

II. THE AMENDED COMPLAINT STILL FAILS TO GIVE WOLVERINE NOTICE OF THE ACTIVITIES ACCUSED OF INFRINGEMENT.

Edge's refusal to notify Wolverine of how it has allegedly infringed renders the Amended Complaint both insufficient to state a claim and insufficient to correct the deficiencies found by this Court on October 20, 2009. (Ex. 2 at 1.) The reason for this insufficiency—and the fundamental problem with Edge's continued refusal to specify or describe exactly what types of electronic/algorithmic trading activities are being accused of infringement—is that *Edge, itself, admitted in its briefing related to Defendants' previous motions to dismiss that not all*

electronic/algorithmic trading can be (or is) infringing. Indeed, in its prior briefing, Edge made crystal clear that it considers electronic/algorithmic trading activities *such as market-making, auto-quoting and equities trading* to be outside the scope of the now-asserted patent claims. (See Edge Opp. to Barclay’s Mot. to Dismiss at 2 n.2, 10-11; Edge Sur-Reply to Wolverine’s Mot. to Dismiss at 6.) Given that, as alleged by Edge in its initial Complaint, Wolverine is a “market maker” (Compl. ¶ 37), that engages in auto-quoting and equities trading activities as part of its market-making responsibilities, Edge’s continued insistence on broadly accusing Wolverine of infringement for generally engaging in electronic/algorithmic trading—an accusation which, of course, encompasses non-infringing electronic market making, auto quoting and equities trading activities—makes it impossible for Wolverine to ascertain why/how it is being accused of infringement, and makes it impossible for Wolverine to respond to the Amended Complaint.³

In fact, many of the Amended Complaint’s allegations are, in effect, admissions that Edge has no substantial basis for bringing a cause of action for infringement against Wolverine. For instance, Edge asserts the following: “Edge cannot know whether Wolverine Trading includes one or both of the elements in its systems without the benefit of discovery” (Am. Compl. ¶ 98); “Edge believes that discovery will also reveal that Wolverine Trading’s automated trading systems include safety logic to reduce the risks and dangers associated with speedy automated derivatives trading” (*id.* ¶ 99); “Edge further believes that discovery will reveal that Wolverine uses its automated trading systems to electronically trade derivatives contracts on other electronic exchanges within the United States,” (*id.* ¶ 105). These very types of “need-discovery allegations” were deemed insufficient in *In re Papst Licensing GmbH Litig.*, 585 F. Supp. 2d 32, 35 (D.D.C. 2008), and should also be rejected here:

The allegations that ‘[a] reasonable opportunity for further investigation or discovery is likely to provide evidentiary support’ that [defendant] has infringed and is infringing the Patents in Suit does not state a claim for infringement. The Complaint merely speculates that [defendant] might have infringed or be infringing and notifies [defendant] and the Court that [plaintiff] intends to investigate whether [plaintiff] has an infringement claim against [defendant]. Thus, the Complaint fails to state a claim as required by Rule 8—it does not contain a “short and plain statement of the claims showing that the pleader is

³ For example, even if accepted as true, Edge’s identification of five derivatives trades by Wolverine (Am. Compl. ¶¶ 96-98) does nothing more than show that Wolverine engages in electronic market-making and auto-quoting activity, which Edge admits is not infringing activity. See Edge Opp. to Barclay’s Mot. to Dismiss at 2 n.2, 10-11; Edge Sur-Reply to Wolverine’s Mot. to Dismiss at 6 (stating that electronic market making and auto-quoting, which were well-known and described in the prior art, are outside the scope of the asserted patent claims).

entitled to relief” sufficient “to give a defendant fair notice” of the claims. The Complaint must be dismissed for failure to state a claim.

Pursuant to the Supreme Court’s decision in *Bell Atlantic Corp. v. Twombly*, 550 U.S. 544, 561-62 (2007), “a defendant should not be burdened with the heavy costs of pretrial discovery that are likely to be incurred in a complex case unless the complaint indicates that the plaintiff’s case is a substantial one.” *Beck v. Dobrowski*, 559 F.3d 680, 682 (7th Cir. 2009). Like the initial Complaint, Edge’s Amended Complaint fails to meet this burden. By continuing to, in effect, allege only that Wolverine engages in automated/electronic trading, Edge obviously hopes that it can prompt costly and harassing discovery and, maybe, find something that will allow Edge’s infringement claims to survive. Federal court complaints cannot be used as such blunt-edged weapons. The rules, and this Court’s October 20 Order, are clear: if Edge cannot even specifically describe its own invention—and, thus, the Wolverine electronic trading activities that allegedly infringe, as distinguished from those which do not/cannot infringe—then Edge cannot proceed with its infringement claim.⁴

CONCLUSION

For the foregoing reasons, Wolverine respectfully requests that this Court dismiss the Amended Complaint.

Dated: August 13, 2010

Respectfully submitted,

By: /s/ Robert W. Unikel

Robert W. Unikel

Deanna L. Keysor

Michelle K. Marek

KAYE SCHOLER LLP

70 W. Madison Street, Suite 4100

Chicago, IL 60602-4231

robert.unikel@kayescholer.com

⁴ A complaint’s allegation is sufficient only when the “pleaded factual content allows the court to draw the reasonable inference that the defendant is liable for the misconduct alleged.” *Ashcroft v. Iqbal*, 129 S. Ct. 1937, 1940 (2009). Edge’s allegations make it no more likely that Wolverine has infringed the patents-in-suit than that Wolverine has not infringed. This should not be enough to allow Edge, a competitor, to obtain discovery on Wolverine’s proprietary business operations.

That Edge is playing fast and loose with its pleadings is plainly revealed by Edge’s approach to its allegations of indirect infringement. (See Am. Compl. ¶¶ 127, 133.) In response to Wolverine’s argument in earlier briefing that Edge failed to adequately plead either contributory infringement or active inducement, *Edge acknowledged that, in fact, it did not (and does not) have a basis to make these allegations*; but, this reality notwithstanding, Edge stated that these unsupported allegations were included “for the sake of completeness, and to avert any potential arguments at a later time of waiver, estoppel, and *res judicata*.” (Edge Resp. to Wolverine at 6.)

deanna.keysor@kayescholer.com
michelle.marek@kayescholer.com
Tel: 312.583.2340
Fax: 312.583.2300

*Attorneys for Defendants Wolverine Trading
L.L.C. and Wolverine Execution Services
L.L.C.*

CERTIFICATE OF SERVICE

I, Robert W. Unikel, hereby certify that I caused a copy of the attached **Memorandum in Support of Defendants Wolverine Trading, L.L.C. and Wolverine Execution Services, L.L.C.'s Motion to Dismiss Amended Complaint** to be served on August 13, 2010 upon counsel of record as follows:

By CM/ECF Notification:

Gavin James O'Keefe
gokeefe@gbclaw.net
Jeana R. Lervick
jlervic@gbclaw.net
Patrick G. Burns
pburns@gbclaw.net
Greer Burns & Crain Ltd.
300 South Wacker Drive
Suite 2500
Chicago, Illinois 60606

Glenna Lynn Gilbert
glgilbert@rkmc.com
Munir R. Meghjee
mrmeghejee@rkmc.com
Ronald Schutz
rjschutz@rkmc.com
Sang A. Young Brodie
sybrodie@rkmc.com
Robins Kaplan Miller & Ciresi LLP
2800 LaSalle Plaza
800 LaSalle Avenue
Minneapolis, Minnesota 55402

*Attorneys for Plaintiffs Edge Capture
L.L.C. and Edge Specialists L.L.C.*

Allan M. Soobert
allansoobert@paulhastings.com
Paul, Hastings, Janofsky & Walker LLP
875 15th Street, N.W.
Washington, D.C. 20005

Emily Newhouse Dillingham
emilydillingham@paulhastings.com
Paul Hastings Janofsky & Walker LLP
191 N. Wacker Drive
Chicago, Illinois 60606

Jeffery G. Randall
jeffrandall@paulhastings.com
Paul Hastings Janofsky & Walker LLP
Palo Alto, California 94304

*Attorneys for Defendants Barclays Bank PLC,
Barclays Capital Inc., UBS AG, UBS Financial
Services Inc., and UBS Securities, L.L.C.*

/s/ Robert W. Unikel
Robert W. Unikel